Situational Awareness Products: What do we have and where is it?

AWT 2013 Summer Experiment

Overview: All GOES-R image products can be found in */IMAGE/sat/area/goesR*, model products in /GRID, and observations in /SURF_OBS. Instructions for locations of specific products is listed below:

GOES-R Simulated Satellite Imagery from the NSSL-WRF

IMAGE -> SAT -> area -> goesR -> simulated -> wrf_arw

- *b08_wv_low*
- *b09_wv_mid*
- *b10_wv_high*
- *b11_ir_cldphase*
- *b12_ir_ozone*
- *b13_ir_clean*
- *b14_ir*
- *b15_ir_dirty*
- *b16_ir_co2*
- *moist_conv*
- *backup_b09_wv_low*
- *b13_ir_clean*

**To access the forecast imagery click the Range/Int button on the Data Selection screen. Then choose the following day (e.g. if it's July 29th, choose July 30th).

GOES-R Simulated Satellite Imagery from the NAM_Nest

IMAGE -> SAT -> area -> goesR -> simulated -> nam_nest

- *b09_wv_mid*
- *b13_ir_clean*

**To access the forecast imagery click the Range/Int button on the Data Selection screen. Then choose the following day (e.g. if it's July 29th, choose July 30th).

Nearcasting Model

GRID -> nrcast -> [time] -> nrcast

- *PW5: 500mb_Mean_lyr_precip_water*
- *PW7: 700mb_Mean_lyr_precip_water*
- *PWD: Vertical_precip_water_diff*
- *TE5: 500mb_Mean_lyr_theta-e*
- *TE7: 700mb_Mean_lyr_theta-e*
- *TED: Vertical_theta-e_diff*

GOES-R Convective Initiation

IMAGE -> SAT -> area -> goesR -> convection -> convinit -> (east|west)

GOES-R Cloud Top Cooling

GRID -> (cinit|cinitw) -> [time] -> cinit -> CTCINST: Cooling_rate

GOES-R Cloud Top Cooling – SRSOR version

GRID -> (cinit_srsor) -> cinit -> CTCINST: Cooling_rate

GOES-R Overshooting Top Detection/Magnitude

GRID -> (cinit|cinitw) -> [time] -> cinit -> Overshoot_detection
GRID -> (cinit|cinitw) -> [time] -> cinit -> Overshoot_magnitude

GOES-R Tropical Overshooting Tops (Magnitude)

VGF -> tots

**Includes GE/GW/MSG and is best view at a global scale

GOES-14 Super Rapid Scan (Experimental) 1-minute imagery

IMAGE -> SAT -> area -> goes14
- *vis1km*
- *ir4km*
- *wv4km*
- *backup_vis1km*

GOES-R Cloud Algorithms

IMAGE -> SAT -> area -> goesR -> cloudprop
- *cldhght*
- *cldtemp*
- *emiss*

Pseudo Geostationary Lightning Mapper

IMAGE -> SAT -> area -> goesR -> convection -> lightning

**VGF needed for range rings: VGF -> AWT -> pglmRangeold.vgf

GLD360 (Gridded Lightning Density)

Density: GRID -> GLD
Point: MISC -> LTNG

**In the MISC -> LTNG the GLD is classified ‘offshore’ and the NLDN is classified ‘domestic’

Earth Networks Lightning

Density: GRID -> entln_conus -> (date_time) -> ltg -> 10min_ltg_density
Storke: GRID -> entln_conus -> (date_time) -> ltg ->